REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-30 are pending in this application. Claims 1, 2, 11, 15, 16, 18, 19, 21-26 and 30 are hereby amended. Claims 1 and 21 are independent. It is submitted that these claims, as originally presented, were in full compliance with the requirements 35 U.S.C. §112. No new matter has been introduced by this amendment. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which the Applicant is entitled. Claims 18-20 were objected to due to a minor informality in claim 18. Claim 18 has been amended to overcome the objection.

Applicant notes that the IDS-1449 indicates that certain art was not considered by the Examiner. Applicant submits herewith duplicate copies of the art that was not considered.

II. REJECTIONS UNDER 35 U.S.C. §102(e)

Claims 1-14, 18 and 21-30 were rejected under 35 U.S.C. §102(b) as being allegedly anticipated by U.S. Patent No. 5,930,369 to Cox et al.

III. RESPONSE TO REJECTIONS

Applicant respectfully submits that the Office Action is not correct in the interpretation of the prior art and therefore that claim 1 is patentable in view of U.S. Patent No. 5,930,369 to Cox et al. (hereinafter, merely "Cox")

As understood by Applicant, Cox relates to inclusion of a watermark into spectral frequency components of the data (image), as disclosed for example in column 13 lines 64 to 65. Spectral frequency components result from a frequency transformation (30), such as the Fourier transform (Cox column 9 lines 10 to 12). The spectral frequency domain is a transform domain and requires inverse transform processing to enable the data to be converted back to the original (spatial) domain to form the watermarked data (see features 34 and 62 of Cox).

Applicant submits that a significant difference between claim 1 and Cox is that the transformer is an inverse transformer, as recite in amended independent claims 1 and 21. Support for this amendment is provided in the Specification as originally filed for example in Figure 4 with reference to element 210.

In contrast to Cox, claim 1 clearly and explicitly recites that transform domain data is inverse transformed into the spatial domain before being combined with the material in the spatial domain to form data embedded material.

As recited on page 5 from lines 18 to 23 of the Specification, a watermark encoding apparatus is arranged to inverse transform the transform domain data from a transform domain into the spatial domain, which is then combined with the material in the spatial domain. This provides an advantage because only the transform domain watermark is transformed into the spatial domain. As such, the inverse transformer, which effects this transformation into the spatial domain can have less precision and range and thereby reduce the cost and complexity of

the encoder. Furthermore, there is no requirement to transform the original material and inverse transform the original material, therefore any losses, which may occur during transformation of the material are reduced.

The Office Action refers to Figure 7 and the accompanying description in Cox. Applicant submits, however, that even though components 54, 58 are termed spatial transform lenses; they convert images **from** a spatial domain into a transform domain. The example of a Fourier transform lens is given in Cox column 14, line 3. Applicant submits that the intention of Cox is to convert the image into a Fourier transform domain to produce a distribution of spectral frequency components over n-orders of the spectrum caused by diffraction. Applicant submits that there is nothing to indicate that image (element 52 in Cox) and watermark (element 56 in Cox) are in anything other than a spatial domain before being passed through the lenses (shown as elements 54 and 58 in Cox). Thus, Applicant submits that the output from each respective lens is an optical transform domain representation and not untransformed material (such as image 105 of the present application into which data is to be embedded). Furthermore, an inverse spatial transform lens is present in the embodiment of Cox at Figure 7 to return the watermarked data representation to the spatial domain.

However, the present invention, as claimed in claim 1, has no inverse transform processor operable on the watermarked data representation, nor does it require one because the combiner forms the watermarked data in the spatial domain. Applicant submits that the Office Action has improperly attempted to equate the optical system of Cox with what is defined in claim 1. However, claim 1 clearly identifies that the inverse transformer is transforming data into the spatial domain whereas Figure 7 of Cox is arranged to transform images in optical form into the Fourier transform domain.

Since the optical system of Figure 7 and accompanying description is simply an alternative embodiment ("by other means" Cox, column 13 line 66) of the basic principle of the invention, clearly the optical system still conforms with the basic principle of the Cox invention as stated in Cox column 13 lines 63 to 65, namely that a watermark is included into spectral frequency components of the data (image). In the present invention, transform domain data is transformed into the spatial domain before being inserted directly into components of the material (e.g. pixels), which are in an untransformed condition.

Therefore, for at least the reasons stated above, Applicant submits that the present invention defined by claims 1 and 21 is patentable.

IV. DEPENDENT CLAIMS

Claims 2-20 depend from claim 1 and claims 22-30 depend from claim 21. Claims 1 and 21 are believed patentable for the reasons discussed above. Claims 2-20 and 22-30 are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

In the event the Examiner disagrees with any of the statements appearing above with respect to the disclosure in the cited reference, it is respectfully requested that the Examiner specifically indicate the portion, or portions, of the reference providing the basis for a contrary view.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicant respectfully requests early passage to issue of the present application.

Please charge any fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicant

By Thomas F. Presson

Thomas F. Presson
Reg. No. 41,442
(212) 588-0800